FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
PATENT NO.	KIND	DAIL	APPLICATION NO.	DAIE			
	-						
EP 526443	A1	19930203	EP 1992-870111	19920731			
R: AT, BE, CH,	DE, DK	, ES, FR, (GB, GR, IT, LI, LU, MC	C, NL, PT, SE			
CA 2075003	AA	19930203	CA 1992-2075003	19920730			
CA 2075003	C	19990119					
AU 9220659	A1	19930204	AU 1992-20659	19920730			
AU 647646	B2	19940324					
JP 05201815	A2	19930810	JP 1992-223220	19920730			
US 6500782	B1	20021231	US 1995-570367	19951211			
PRIORITY APPLN. INFO.:			US 1991-739945	A 19910802			
OTHER SOURCE(S):	MARPAT	118:163263	1 ·				
GT							

AB The alkyl polyglycoside surfactants I (x = 1-8; n =8-18) enhance the herbicidal activity of glyphosate (no data). The compns. also contain acetylenic diols RCR1(OH)C:CCRR1(OH) (R = C1-8 alkyl; R1 = Me, Et, cyclopropyl, Ph) as foam-moderating agents. A composition comprised glyphosate monoisopropylamine salt 1, water 0.97, I (x = 1.6, n = 9-11) 0.27, and 2,5,8,11-tetramethyl-6-decyne-5,8-diol (30% solution) 0.2 part.

=> d l15 1-15 ibib hitstr abs

L15 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

T

ACCESSION NUMBER:

2006:146474 CAPLUS

TITLE:

Chemical constituents of rice (Oryza sativa) hulls and

their herbicidal activity against duckweed (Lemna

paucicostata Hegelm 381)

AUTHOR (S):

Chung, Ill Min; Ali, Mohd; Ahmad, Ateeque; Lim, Jung Dae; Yu, Chang Yeon; Kim, Jin Seog

CORPORATE SOURCE:

Department of Applied Life Science, Konkuk University,

Seoul, 143-701, S. Korea

SOURCE:

Phytochemical Analysis (2006), 17(1), 36-45

CODEN: PHANEL; ISSN: 0958-0344

PUBLISHER:

John Wiley & Sons Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English IT INDEXING IN PROGRESS

AB Four new compds., stigmastanol- 3β -p-glyceroxydihydrocoumaroate (1), stigmastanol-3 β -p-butanoxydihydrocoumaroate (2), lanast-7,9(11)-dien- $3\alpha,15\alpha$ -diol- 3α -D-glucofuranoside (3) and $1-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-\beta-D-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-\beta-D-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-\beta-D-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-\beta-D-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-\beta-D-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-\beta-D-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-\beta-D-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-\beta-D-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-\beta-D-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-\beta-D-phenyl-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-hydroxy-3,7-dimethyl-11-aldehydic-tetradecane-2-hydroxy-3,7-dimethyl-2-hydroxy-3,7-dime$ glucopyranoside (4), along with several known compds. were

isolated from the methanol extract of hulls of Oryza sativa. structures were established by one- and two-dimensional NMR and in combination with IR, EI/MS, FAB/MS and HR-FAB/MS. Compound (3) strongly inhibited the growth of duckweed (Lemna paucicostata Hegelm 381), while compds. (2) and (4) exhibited weak inhibition.

REFERENCE COUNT:

THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS 20 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:102252 CAPLUS

DOCUMENT NUMBER:

138:380771

TITLE:

Characterization of cytochrome P450-mediated bensulfuron-methyl O-demethylation in rice

AUTHOR (S):

Deng, Fan; Hatzios, Kriton K.

CORPORATE SOURCE:

Department of Plant Pathology, Physiology and Weed Science, Laboratory for Molecular Biology of Plant Stress, Virginia Polytechnic Institute and State

University, Blacksburg, VA, 24061-0330, USA

SOURCE:

Pesticide Biochemistry and Physiology (2003), Volume

Date 2002, 74(2), 102-115

CODEN: PCBPBS; ISSN: 0048-3575

PUBLISHER:

Elsevier Science

DOCUMENT TYPE:

Journal English LANGUAGE:

The cytochrome P 450-mediated metabolism of the herbicide bensulfuron-Me (BSM) was investigated in rice (Oryza sativa L., cv. Lemont) seedlings. Shoots and roots of rice seedlings were harvested at 0, 4, 8, 12, 24, and 48 h following treatment with 1 μ M [14C]BSM. BSM and its metabolites were extracted from plant tissues with aqueous methanol, purified by TLC, and identified by HPLC and mass spectrometry using authentic metabolite stds. The major BSM metabolites identified in rice roots were: Me α -(4-hydroxy-6-methoxypyrimidin-2yl)carbamoylsulfamoyl-o-toluate (4-hydroxy-BSM); Me (α aminosulfonyl)-o-toluate; and N-4,6-dimethoxypyrimidin-2-yl urea. Crude microsomal prepns. from roots of 5-day etiolated rice seedlings were treated with digitonin and purified by fast protein liquid chromatog. (FPLC) using Superose 12 HR gel column, Ph superose HR5/5 column, Mono Q anion column, and Mono P chromatofocusing column. SDS-PAGE anal. showed that the purified rice P 450 migrated to a single protein band with a mol. mass of about 60 kDa. P 450 activity was determined using BSM as substrate and 4-hydroxy-BSM as a product. The optimum pH of the rice P 450 catalyzing the O-demethylation of BSM was 7.2. P 450 activity was inhibited in vivo and in vitro by known P 450 inhibitors such as ABT, PBO, and TET and cytochrome c. Ethanol, the safeners NA and dimuron, and BSM induced the in vivo activity of the rice P 450. The results of this study demonstrate that a P 450-mediated O-demethylation of BSM plays an important role in the metabolism of BSM by rice seedlings.

REFERENCE COUNT:

THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS 38 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:457423 CAPLUS

DOCUMENT NUMBER: 137:228035

TITLE: Acteoside from Rehmannia glutinosa nullifies paraquat

activity in Cucumis sativus

AUTHOR (S): Chun, Jae Chul; Kim, Jin Cheol; Hwang, In Taek; Kim,

Sung Eun

CORPORATE SOURCE: Faculty of Biotechnology and Research Center of

Bioactive Materials, Chonbuk National University,

Chonju, Jeonju, 561-756, S. Korea

QAZI

SOURCE: Pesticide Biochemistry and Physiology (2002), 72(3),

153-159

CODEN: PCBPBS; ISSN: 0048-3575

PUBLISHER: Elsevier Science

DOCUMENT TYPE: Journal LANGUAGE: English

AB A natural substance that nullifies paraquat activity was isolated and identified from paraquat-tolerant Rehmannia glutinosa. The active component was characterized by spectral anal. as 3,4-dihydroxy-β-phenethyl-O-α-rhamnopyranosyl-(1→3)-4-O-caffeoyl-β-D-

phenethyl-O- α -rhamnopyranosyl- $(1\rightarrow 3)$ -4-O-caffeoyl- β -D-glucopyranoside (acteoside). Phytotoxic injury of paraquat on the leaves of paraquat-susceptible cucumber was greatly decreased when paraquat was applied in combination with the isolated acteoside. No necrosis was observed in the cucumber leaves treated with 0.2 mM paraquat in 0.2% acteoside solution Acteoside also decreased the levels of chlorophyll loss and malondialdehyde production caused by paraquat in a

concentration-dependent

manner. These results imply that the acteoside detected in R. glutinosa is associated with paraquat tolerance.

REFERENCE COUNT: 26 THE

26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:341405 CAPLUS

DOCUMENT NUMBER: 132:325734

TITLE: FILIA determination of imazethapyr herbicide

in water

AUTHOR(S): Lee, M.; Durst, R. A.; Spittler, T. D.; Forney, D. R.

CORPORATE SOURCE: Cornell Analytical Laboratories, New York State

Agricultural Experiment Station, Cornell University,

Geneva, NY, 14456, USA

SOURCE: ACS Symposium Series (2000), 751(Agrochemical Fate and

Movement), 135-144

CODEN: ACSMC8; ISSN: 0097-6156

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

In response to the need for a rapid, economical method to determine the herbicide, imazethapyr, at low concns. in water, the capillary FILIA (flow injection liposome immunoanal.) system was used. A capillary tube (57 cm + 0.45 mm inside diam) with immobilized imazethapyr antibody was used as the immunoreactor column in the flow injection system. The assay is based on sequential competitive binding between imazethapyr and imazethapyr-tagged liposomes for a limited number of antibody binding sites. Subsequent liposome rupture by injecting a detergent (n-octyl β -D- glucopyranoside) releases carboxyfluorescein which elutes and is measured fluorometrically. Water samples from wells, lysimeters, and runoff were collected from test plots and monitored watersheds following imazethapyr application at the Chesapeake Farms environmental research center, Chestertown, Maryland. Imazethapyr residues in water were concentrated 10 times by partitioning into methylene chloride, which was then evaporated Residue was dissolved in tris-buffered saline solution and injected onto the immunocolumn. The anal. has a limit of detection of 0.01 μg/L and a working range of 0.02-10 μg/L imazethapyr.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1998:733275 CAPLUS

· QAZI

DOCUMENT NUMBER:

130:136436

TITLE:

In vivo characterization of the drug resistance profile of the major ABC transporters and other components of the yeast pleiotropic drug resistance

AUTHOR(S):

Kolaczkowski, Marcin; Kolaczkowska, Anna; Luczynski,

Jacek; Witek, Stanislaw; Goffeau, Andre

CORPORATE SOURCE:

Unite de Biochimie Physiologique, Universite Catholique de Louvain, Louvain la Neuve, Belg.

SOURCE:

Microbial Drug Resistance (Larchmont, New York)

(1998), 4(3), 143-158

CODEN: MDREFJ; ISSN: 1076-6294

PUBLISHER:

Mary Ann Liebert, Inc.

DOCUMENT TYPE:

Journal

LANGUAGE: English

Multidrug resistance (MDR) mediated by broad specificity transporters is one of the most important strategies used by pathogens, including cancer cells, to evade chemotherapy. In the yeast Saccharomyces cerevisiae, a complex pleiotropic drug resistance (PDR) network of genes involved in MDR is composed of the transcriptional regulators Pdr1p and Pdr3p, which activate expression of the ATP-binding cassette (ABC) MDR transporter-encoding genes PDR5, SNQ2, and YOR1 as well as other not yet identified genes. Three hundred forty-nine toxic compds. were screened in isogenic S. cerevisiae strains deleted of PDR5, SNQ2, or YOR1 in different combinations as well as both PDR1 and PDR3. The screen revealed extremely promiscuous, yet limited, and to a large extent overlapping but distinct drug resistance profiles of Pdr5p, Snq2p, and Yor1p. These ABC-MDR transporters mediated resistance to most currently available classes of clin. and agriculturally important fungicides and also to many antibiotics, herbicides, and others. Several classes of compds. were identified for the 1st time in the drug resistance spectrum of MDR transporters. These are fungicides, such as anilinopyrimidines, benzimidazoles, benzenedicarbonitriles, dithiocarbamates, quanidines, imidothiazoles, polyenes, pyrimidynyl carbinols, and strobilurin analogs; the urea derivative and anilide herbicides; flavonoids, several membrane lipids resembling detergents; and newly synthesized lysosomotropic aminoesters; as well as many others. Identification of compds. showing Pdrlp, Pdr3p-dependent, but Pdr5p-, Snq2p-, and Yorlp-independent toxicity, reflected in the case of rhodamine 6G, by efflux alterations, suggests the involvement of new drug resistance genes and is a first step toward their identification. The highly increased toxicity of bile acids toward the PDR1, PDR3 double disruptant together with the decreased level of BAT1 promoter dependent β -galactosidase activity suggest that the Batlp ABC transporter is a new member of the PDR network. These results may contribute to a better understanding of the mechanism of MDR, in particular in the pathogenic yeast Candida albicans. They also provide an indication of the physiol. function of MDR transporters and suggest new approaches for the cloning of the mammalian bile acid transporters.

REFERENCE COUNT:

THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

86

ACCESSION NUMBER:

1998:140639 CAPLUS

TITLE:

FILIA determination of imazethapyr herbicide

in watershed monitoring studies.

AUTHOR (S):

Lee, M. Y.; Durst, R. A.; Spittler, T. D.; Forney, D.

CORPORATE SOURCE:

Cornell Analytical Labs, Cornell University, Geneva,

NY, 14456, USA

SOURCE:

Book of Abstracts, 215th ACS National Meeting, Dallas,

March 29-April 2 (1998), AGRO-074. American Chemical

Society: Washington, D. C.

CODEN: 650TAA

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB A capillary FILIA (Flow Injection Liposome ImmunoAnal.) system has been applied for the determination of the herbicide imazethapyr in water. A capillary tube (60 cm + 0.45 mm i.d.) with immobilized imazethapyr antibody was used as the immunoreactor column in the flow injection system. The assay is based on sequential competitive binding between imazethapyr and imazethapyr-tagged liposomes for a limited number of antibody binding sites. Subsequent rupture of the liposomes by injection of a detergent (n-octyl β-L- glucopyranoside) releases 5-carboxyfluorescene which elutes and is measured fluorometrically. Water samples from wells, lysimeters and run-off were collected from test plots and monitored watersheds following imazethapyr application at the Chesapeake Farms environmental research center (Chestertown, MD). Imazethapyr residues in water samples were concentrated 10 times by partitioning

into methylene chloride, which was then evaporated The residue was dissolved in TBS (Tris Buffered Saline) solution and injected onto the immunocolumn. The anal. provides a limit of detection of 0.01 μ g/L and a working range of 0.02-10 μ g/L imazethapyr.

L15 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1997:64688 CAPLUS

DOCUMENT NUMBER:

126:100616

TITLE:

Capillary electrophoresis of herbicides. II.

Evaluation of alkylglucoside chiral surfactants in the

enantiomeric separation of phenoxy acid herbicides

AUTHOR (S):

Mechref, Yehia; El Rassi, Ziad

CORPORATE SOURCE:

Department of Chemistry, Oklahoma State University,

Stillwater, OK, 74078-3071, USA

SOURCE:

Journal of Chromatography, A (1997), 757(1 + 2),

263-273

CODEN: JCRAEY; ISSN: 0021-9673

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

AB Two chiral alkylglucoside surfactants, namely n-octyl- (OG) and

n-nonyl- β -D- glucopyranoside (NG), were evaluated in the

enantiomeric separation of phenoxy acid herbicides. The enantiomeric resolution

could be manipulated readily by adjusting the surfactant concentration, ionic strength, pH and separation temperature. The optimum surfactant concentration needed for

maximum enantiomeric resolution varied among the different analytes and was an inverse function of the hydrophobicity of the phenoxy acid herbicides, with the most hydrophobic solute requiring less surfactant concentration for attaining a baseline enantiomeric resolution. Due to the ionic nature of the phenoxy acid herbicides, increasing the pH of the running electrolytes increased the degree of ionization of the acidic herbicides, thus decreasing their association with the chiral micelles and in turn their enantiomeric resolution. Increasing the ionic strength seems to enhance both the solubilization of the solute in the micelle and the chiral interaction of the solute with the micelle with a net increase in enantiomeric resolution Performing the separation at a sub-ambient temperature favored an enhanced solute-micelle association and improved enantiomeric resolution

·QAZI

ACCESSION NUMBER:

1996:233422 CAPLUS

DOCUMENT NUMBER:

124:310876

TITLE:

Protoporphyrinogen oxidase of Myxococcus xanthus.

Expression, purification, and characterization of the

cloned enzyme

AUTHOR (S):

Dailey, Harry A.; Dailey, Tamara A.

CORPORATE SOURCE:

Department Microbiology, University Georgia, Athens,

GA, 30602-2605, USA

SOURCE:

Journal of Biological Chemistry (1996), 271(15),

8714-18

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER:

American Society for Biochemistry and Molecular

Biology Journal

DOCUMENT TYPE: LANGUAGE:

English

Protoporphyrinogen oxidase (EC 1.3.3.4) catalyzes the six electron oxidation of protoporphyrinogen IX to protoporphyrin IX. The enzyme from the bacterium Myxococcus xanthus has been cloned, expressed, purified, and characterized. The protein has been expressed in Escherichia coli using a Tac promoter-driven expression plasmid and purified to apparent homogeneity in a rapid procedure that yields approx. 10 mg of purified protein per L of culture. Based upon the deduced amino acid sequence the mol. weight of a single subunit is 49,387. Gel permeation chromatog. in the presence of 0.2% n-octyl- β -D- glucopyranoside yields a mol.

weight of approx. 100,000 while SDS gel electrophoresis shows a single band at 50,000. The native enzyme is, thus, a homodimer. The purified protein contains a non-covalently bound FAD but no detectable redox active metal. The M. xanthus enzyme utilizes protoporphyrinogen IX, but not coproporphyrinogen III, as substrate and produces 3 mol of H2O2/mol of protoporphyrin. The apparent Km and kcat for protoporphyrinogen in assays under atmospheric concns. of oxygen are 1.6 μM and 5.2 min-1, resp. The di-Ph ether herbicide acifluorfen at 1 µM strongly inhibits the

enzyme's activity.

L15 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1996:216813 CAPLUS

TITLE:

AUTHOR (S):

Metabolism of 14C-sodium acifluorfen in peanut Raub, Michael F.; Vengurlekar, Shailesh S.; Rieser, Clarice A.; Panek, Mary G.; Veit, Petra; McGown, Steven R.; Geiger, Darcy S.

CORPORATE SOURCE:

SOURCE:

ABC Laboratories, Inc., Columbia, MO, 65202, USA Book of Abstracts, 211th ACS National Meeting, New Orleans, LA, March 24-28 (1996), AGRO-051. American

Chemical Society: Washington, D. C.

CODEN: 62PIAJ

DOCUMENT TYPE:

Conference; Meeting Abstract

LANGUAGE:

English

Sodium acifluorfen, sodium 5-(2-chloro-4-trifluoromethylphenoxy)-2-ΆB nitrobenzoate, is a post-emergent herbicide used for broadleaf weed control in soybeans, peanuts and rice. The metabolic fate, elucidated in e.g. excised soybean leaf tissue, indicated rapid cleavage of the diphenylether bond and subsequent conjugation of the two resulting portions of the mol. In this study the fate of the nitrobenzoic acid portion of the mol. was characterized in mature peanut seed and hulls after treatment simulating field conditions. The seed and hulls each contained at lest 16 components, and acifluorfen comprised only a small fraction of the total residues, 0.006 ppm (3.6% TRR) in the seed and 0.085 ppm (12% TRR) in the hulls. The predominant conjugates found in the hull were isolated and identified using mass spectral anal. as a cysteine conjugate, S-(3-carboxy-4-nitrophenyl)cysteine, and as a S-glucoside,

3-carboxy-4-nitropheyl-1-thio B-D glucopyranoside.

L15 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:217693 CAPLUS

DOCUMENT NUMBER: 122:122221

TITLE: Micellar electrokinetic capillary chromatography with

in situ charged micelles. IV. Influence of the nature

of the alkylglycoside surfactant

AUTHOR(S): Smith, Joel T.; El Rassi, Ziad

CORPORATE SOURCE: Department of Chemistry, Oklahoma State University,

Stillwater, OK, 74078-0447, USA

SOURCE: Journal of Chromatography, A (1994), 685(1), 131-43

CODEN: JCRAEY; ISSN: 0021-9673

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

AB Four different in situ charged micellar phases were evaluated in micellar

electrokinetic capillary chromatog. (MECC) of neutral and acidic

herbicides, and other aromatic compds. In situ charged micelles refer to dynamically charged entities that are formed via the complexation of borate with surfactants having sugar head groups. These dynamically charged surfactants yield micelles with adjustable surface charge densities which can be conveniently manipulated by changing borate

concentration

and pH of the running electrolyte. The four surfactants, octanoylsucrose (OS), octyl- β -D- glucopyranoside (OG), octyl- β -D-

maltopyranoside (OM) and nonanoyl-N-methylglucamide (MEGA 9), in the presence of alkaline borate yielded micelles characterized by migration time windows of varying width. The width of the migration time window was largely influenced by the nature of the sugar head group of the polyolic surfactant. The electrochromatog. behavior of OS, OM, OG and MEGA 9 was influenced by both the nature of the sugar head group and the length of the alkyl tail. OS, which differed from the other surfactants by having an alkyl tail with one fewer carbon atom, exhibited the lowest retention. MEGA 9 with its acyclic sugar head group and the presence of a polar amide linkage between the sugar and the alkyl tail showed a medium retentivity towards the various solutes under study. OG and OM, which differed from each other by the nature of the sugar head group, exhibited more or less similar retention behavior. Overall, due to differences in their migration time windows and retention behaviors, the four micellar phases afforded different selectivities toward charged and neutral solutes. The separation efficiencies achieved with in situ charged micelles, which exceeded 750000 plates/m, appear to be superior to those achieved with traditionally used micellar phases.

L15 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:170516 CAPLUS

DOCUMENT NUMBER: 122:229703

TITLE: Micellar electrokinetic capillary chromatography with

in situ charged micelles: 3. Evaluation of

alkylglucoside surfactants as anionic butylboronate

complexes

AUTHOR(S): Smith, Joel T.; Rassi, Ziad El

CORPORATE SOURCE: Department of Chemistry, Oklahoma State University,

Stillwater, OK, USA

SOURCE: Electrophoresis (1994), 15(10), 1248-59

CODEN: ELCTDN; ISSN: 0173-0835

DOCUMENT TYPE: Journal LANGUAGE: English

AB This article represents an extension to a new approach introduced very

recently by the laboratory for the control of the surface charge d. as well as the hydrophobic character of micellar phases used in micellar electrokinetic capillary chromatog. (MECC). The approach is based on the complexation of polyolic surfactants, e.g., alkylglucosides, with butylboronate to form in situ branched, anionic surfactants. The butylboronate can also incorporate into the micelle via its alkyl tail and acts as a class I organic additive that mainly modifies the micelle by decreasing the critical micellar concentration, i.e., increasing the hydrophobic

character of the micelle, while exhibiting little influence on the aqueous phase. The net result is an in situ charged micellar entity whose hydrophobic character is dynamically altered. The alkylglucoside-butylboronate micellar phases yielded high separation efficiency and proved useful in the separation of charged and neutral herbicides as well as the chiral separation of medicarpins and precursors, and dansylated D and L-amino acids in the presence of native or modified cyclodextrin chiral selectors.

L15 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:291972 CAPLUS

DOCUMENT NUMBER: 120:291972

TITLE: Micellar electrokinetic capillary chromatography with

in situ charged micelles: II. Evaluation and comparison of octylmaltoside and octylsucrose surfactants as anionic borate complexes in the

separation of herbicides

AUTHOR(S): Smith, Joel T.; El Rassi, Ziad

CORPORATE SOURCE: Dep. Chem., Oklahoma State Univ., Stillwater, OK,

74078-0447, USA

SOURCE: Journal of Microcolumn Separations (1994), 6(2),

127-38

CODEN: JMSEEJ; ISSN: 1040-7685

DOCUMENT TYPE: Journal LANGUAGE: English

This report is an extension of the authors' previous work involving the development of in situ charged micellar phases with adjustable surface charge d. for micellar electrokinetic capillary chromatog. (MECC) of neutral and charge herbicides. The micelles evaluated here are basically alkyldisaccharide-borate complexes in which the surface charge d. can be conveniently varied by changing the operating parameters such as borate concentration and/or pH of the running electrolyte. The two alkyldisaccharide surfactants (i.e., octyl- β -D-maltopyranoside and octylsucrose), having the same alkyl tail but differing in the nature of the sugar polar head group, were compared and characterized over a wide range of conditions using neutral and acidic herbicides as model solutes. effects of the operating parameters are discussed in terms of mobility, elution range parameter, capacity factor, peak capacity, and separation efficiency. The retention energetics of the micellar phases were studied using two homologous series, alkylphenylketones and alkylbenzenes. At constant micellized surfactant concentration, the two in situ charged micellar phases exhibited homoenergetic retention behavior toward the homologous solutes. On the other hand, even though the two surfactants differed by the nature of one sugar residue in their polar head groups, the micelles exhibited different hydrophobic character, with octylmaltoside yielding higher retention.

L15 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:289122 CAPLUS

DOCUMENT NUMBER: 120:289122

TITLE: Micellar electrokinetic capillary chromatography with

in situ charged micelles. 1. Evaluation of

N-D-Gluco-N-methylalkanamide surfactants as anionic

borate complexes

Smith, Joel T.; Nashabeh, Wassim; El Rassi, Ziad AUTHOR (S): CORPORATE SOURCE:

Department of Chemistry, Oklahoma State University,

Stillwater, OK, 74078-0447, USA

Analytical Chemistry (1994), 66(7), 1119-33 SOURCE:

CODEN: ANCHAM; ISSN: 0003-2700

DOCUMENT TYPE: Journal LANGUAGE: English

A series of N-D-gluco-N-methylalkanamide (MEGA) surfactants was evaluated in micellar electrokinetic capillary chromatog. (MECC) of neutral and charged species. The nonionic MEGA surfactants are readily converted in situ to anionic borate complexes through the association between their polyhydroxy head groups and borate ions at alkaline pH. The MEGA-borate complex surfactants yielded micelles with adjustable surface charge d., and consequently, the magnitude of the retention window was readily altered by the pH and the concentration of borate in the running electrolyte. Studies by 11B NMR and liquid secondary ion mass spectrometry on the borate complex formation with MEGA surfactants permitted the quant. and qual. determination of the various MEGA-borate complexes, resp., and allowed the comparison of the MEGA-borate micelles to other in situ charged micelles recently introduced by this laboratory, i.e., the alkyl glucopyranoside -borate micelles. The bulky polyhydroxy head group of the MEGA-borate surfactants yielded MECC systems with unique retention properties toward neutral and charged species. At constant micellized surfactant concentration,

the

methylene group selectivity of various homologous series, e.g., alkylbenzenes, phenylalkyl alcs., and Ph alkyl ketones, was largely unaffected by the length of the alkyl tail of the surfactant, indicating a similar physicochem. basis for retention on the various MEGA-borate micellar phases. Also, when the micellized surfactant concentration was held constant, the homologous solutes exhibited homoenergetic retention with the various in situ charged micellar phases. Under the same conditions, the capacity factors of neutral solutes increased linearly with the alkyl chain length of the MEGA surfactants, indicating an increase in the hydrophobic phase ratio of the MECC systems. The MEGA-borate micellar phases were useful in the separation of a number of herbicides, polyaroms., barbiturates, and dansyl amino acids. In addition, in the presence of small amts. of γ -cyclodextrin, the MEGA-borate micelles allowed for the high resolution chiral separation of D,L dansyl amino acids.

L15 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:15649 CAPLUS

DOCUMENT NUMBER: 118:15649

TITLE: Micellar electrokinetic capillary chromatography of

neutral solutes with micelles of adjustable surface

charge density

AUTHOR (S): Cai, Jianyi; El Rassi, Ziad

CORPORATE SOURCE: Dep. Chem., Oklahoma State Univ., Stillwater, OK,

74078-0447, USA

SOURCE: Journal of Chromatography (1992), 608(1-2), 31-45

CODEN: JOCRAM; ISSN: 0021-9673

DOCUMENT TYPE: Journal LANGUAGE: English

Novel micelles with adjustable surface charge d. were introduced for micellar electrokinetic capillary chromatog. These micelles are based on the complexation between octylglucoside surfactant and alkaline borate. The surface charge d. of the octylglucoside-borate micelles can be conveniently varied by changing the operating parameters such as borate concentration and/or pH of the running electrolyte. This feature permitted the tuning of the elution range, a parameter that largely influences the peak capacity and resolution in micellar electrokinetic capillary chromatog. Furthermore, with its balanced hydrophile-lipophile character, the octylglucoside-borate micellar system allowed the separation of hydrophobic species including herbicides, e.g., prometon, prometryne, propazine and butachlor, and some polyarom. hydrocarbons. High separation efficiencies were obtained over a wide range of elution conditions, and consequently the detection limit for the herbicides was at 18-52 fmol using UV detection.

L15 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1983:485370 CAPLUS

DOCUMENT NUMBER:

99:85370

TITLE:

Glucose induced hydrogen ion influx and transient currents in excised roots: particularly those of Zea

mays

AUTHOR (S):

Kennedy, C. D.; Stewart, R. A.

CORPORATE SOURCE:

Dep. Biochem. Physiol. Soil Sci., Wye Coll., Ashford,

TN25 5AH, UK

SOURCE:

Journal of Experimental Botany (1982), 33(137),

1220-38

CODEN: JEBOA6; ISSN: 0022-0957

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Application of D-glucose to solns. bathing excised maize, wheat, pea, and bean roots caused a rapid depolarization of the elec. potentials between the cut tops of the roots and the bathing solution, due entirely to glucose-induced H+ fluxes. Current and H+ fluxes were strongly influenced by external pH, the optimum pH for glucose-induced current charge being .apprx.4.0. Compds. which depolarized the transroot potential also inhibited the glucose-induced depolarization. Eadie-Hofstee plots relating the depolarization of transroot potential to the concns. of D-glucose or 3-O-methyl-D-glucopyranoside (I) showed that Km values increased with increasing concentration and were very similar to reported

values of I uptake in maize root segments. Km Values for a similar range of D-glucose concns. did not vary with pH or with membrane depolarization, due to a 10-fold increase in KCl concentration ΔV max Was lowered by an increase in external pH or a decrease in transroot potential. Proton and elec. gradients can thus affect glucose-induced H+ influx. The auxin herbicide, 2,4-dichlorophenoxyethanoic acid (0.01 mM) stimulated the glucose-induced depolarizations in a manner consistent with an increase in cytoplasmic pH.

=> logoff

=>

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:H

COST IN U.S. DOLLARS SINCE FILE TOTAL . ENTRY SESSION FULL ESTIMATED COST 104.94 108.41

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE
-21.75
-21.75

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 13:22:53 ON 10 MAY 2006

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:

LOGINID:

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1202sxq

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America NEWS 2 "Ask CAS" for self-help around the clock

NEWS 3 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/ USPAT2

NEWS 4 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB

NEWS 5 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to INPADOC

NEWS 6 JAN 17 Pre-1988 INPI data added to MARPAT

NEWS 7 JAN 17 IPC 8 in the WPI family of databases including WPIFV

NEWS 8 JAN 30 Saved answer limit increased

NEWS 9 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results

NEWS 10 FEB 22 The IPC thesaurus added to additional patent databases on STN

NEWS 11 FEB 22 Updates in EPFULL; IPC 8 enhancements added

NEWS 12 FEB 27 New STN AnaVist pricing effective March 1, 2006

NEWS 13 FEB 28 MEDLINE/LMEDLINE reload improves functionality

NEWS 14 FEB 28 TOXCENTER reloaded with enhancements

NEWS 15 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral property data

NEWS 16 MAR 01 INSPEC reloaded and enhanced

NEWS 17 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes

NEWS 18 MAR 08 X.25 communication option no longer available after June 2006

NEWS 19 MAR 22 EMBASE is now updated on a daily basis

NEWS 20 APR 03 New IPC 8 fields and IPC thesaurus added to PATDPAFULL

QAZĮ

NEWS 21 APR 03 Bibliographic data updates resume; new IPC 8 fields and IPC thesaurus added in PCTFULL

NEWS 22 APR 04 STN AnaVist \$500 visualization usage credit offered

NEWS 23 APR 12 LINSPEC, learning database for INSPEC, reloaded and enhanced

NEWS 24 APR 12 Improved structure highlighting in FQHIT and QHIT display in MARPAT

NEWS 25 APR 12 Derwent World Patents Index to be reloaded and enhanced during second quarter; strategies may be affected

NEWS 26 MAY 10 CA/Caplus enhanced with 1900-1906 U.S. patent records

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT http://download.cas.org/express/v8.0-Discover/

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

COMPLETE THE STN SURVEY - APRIL 27 THROUGH MAY 31

Dear valued STN customer,

In an effort to enhance your experience with STN, we would like to better understand what you find useful. Please take approximately 5 minutes to complete a web survey.

If you provide us with your name, login ID, and e-mail address, you will be entered in a drawing to win a free iPod(R). Your responses will be kept confidential and will help us make future improvements to STN.

Take survey: http://www.zoomerang.com/survey.zgi?p=WEB2259HNKWTUW

Thank you in advance for your participation.

FILE 'HOME' ENTERED AT 13:13:01 ON 10 MAY 2006

=> ile registry

ILE IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> file registry
COST IN U.S. DOLLARS

SINCE FILE TOTAL

FULL ESTIMATED COST ENTRY SESSION 0.21 0.21

FILE 'REGISTRY' ENTERED AT 13:13:16 ON 10 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 MAY 2006 HIGHEST RN 883631-57-0 DICTIONARY FILE UPDATES: 9 MAY 2006 HIGHEST RN 883631-57-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/reqprops.html

=> s 110615-47-9/rn L1 1 110615-47-9/RN

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN RN 110615-47-9 REGISTRY *

* Use of this CAS Registry Number alone as a search term in other STN files may result in incomplete search results. For additional information, enter HELP RN* at an online arrow prompt (=>).

ED Entered STN: 10 Oct 1987

CN D-Glucopyranose, oligomeric, C10-16-alkyl glycosides (CA INDEX NAME)

MF Unspecified

CI MAN, GRS

SR US Environmental Protection Agency (US EPA)

LC STN Files: CHEMLIST, MSDS-OHS, USPATFULL Other Sources: NDSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

=> file caplus
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 2.34 2.55

FILE 'CAPLUS' ENTERED AT 13:13:53 ON 10 MAY 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 May 2006 VOL 144 ISS 20 FILE LAST UPDATED: 9 May 2006 (20060509/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s l1

L2 0 L1

=> s 12

L3 0 L1

=> s l1

L4 0 L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.92 3.47

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 13:14:52 ON 10 MAY 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

```
FILE COVERS 1907 - 10 May 2006 VOL 144 ISS 20
FILE LAST UPDATED: 9 May 2006 (20060509/ED)
Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:
http://www.cas.org/infopolicy.html
=> s 11
L5
             0 L1
=> s alkyl polyglycoside
        567154 ALKYL
           657 POLYGLYCOSIDE
           508 ALKYL POLYGLYCOSIDE
L6
                  (ALKYL (W) POLYGLYCOSIDE)
=> s D-glucopyranisode
       2311575 D
             0 GLUCOPYRANISODE
             0 D-GLUCOPYRANISODE
L7
                  (D(W)GLUCOPYRANISODE)
=> s glucopyranisode
             0 GLUCOPYRANISODE
=> s glucopyraniside
             0 GLUCOPYRANISIDE
=> s glucopyranoside
         15090 GLUCOPYRANOSIDE
=> s sulfonylureas
         4088 SULFONYLUREAS
L11
=> s 16 and 111
             1 L6 AND L11
L12
=> s 16 and 110
             9 L6 AND L10
L13
=> s 16 and herbicide
         68213 HERBICIDE
T.14
             5 L6 AND HERBICIDE
=> s 110 and herbicide
         68213 HERBICIDE
L15
            15 L10 AND HERBICIDE
=> d l13 1-9 ibib hitstr abs
L13 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2002:588521 CAPLUS
DOCUMENT NUMBER:
                         138:155253
TITLE:
                         Effects from reaction condition on DP-value, ratio of
                         \alpha- and \beta- glucopyranoside on alkyl
                         polyglycosides
AUTHOR(S):
                         Jin, Xin; Zhang, Shufen; Yang, Jinzong; Tang, Bingtao;
                         Yu, Ning; Zhu, Minggui
```

QAZI

CORPORATE SOURCE: State Key Laboratory of Fine Chemicals, Dalian

University of Technology, Dalian, 116012, Peop. Rep.

China

SOURCE: Xiandai Huagong (2002), 22(4), 30-33

CODEN: HTKUDJ; ISSN: 0253-4320

PUBLISHER: Xiandai Huagong Bianjibu

DOCUMENT TYPE: Journal LANGUAGE: Chinese

reaction time, etc.

AB Alkyl polyglycosides (APGs) were prepared by p-toluenesulfonic acid-catalyzed acetalization of glucose with fatty alc. mixture made of dodecanol, tetradecanol, and hexadecanol. APGs' structures were characterized, the average d.p. (DP-value) and the ratio of α-D-glucopyranoside to β-D-glucopyranoside were calculated The effects of reaction conditions on DP-value, ratio of α-D-glucopyranoside to β-D-glucopyranoside, ratio of glucopyranoside to glucofuranoside were also studied. The results showed that the products with differences in DP-value, ratio of α-to β-D-glucopyranoside and ratio of glucopyranoside to glucofuranoside were gotten by controlling reaction conditions: such as molar ratio of alc. to glucose, reaction temperature, amount of catalyst, and

L13 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:132795 CAPLUS

DOCUMENT NUMBER:

137:213062

TITLE:

Determination of total concentration of alkyl

polyglycosides in aqueous solution using near infrared

transmittance spectroscopy

AUTHOR(S):

Kim, Jong-Yun; Woo, Young-Ah; Kim, Hyo-Jin; Kim,

Jong-Duk

CORPORATE SOURCE:

Department of Chemical Engineering, Korea Advanced Institute of Science and Technology, Taejon, 305-701,

S. Korea

SOURCE:

Near Infrared Spectroscopy, Proceedings of the International Conference, 9th, Verona, Italy, June 13-18, 1999 (2000), Meeting Date 1999, 441-445. Editor(s): Davies, Anthony M. C.; Giangiacomo, Roberto. NIR Publications: Chichester, UK.

CODEN: 69CGZM; ISBN: 0-9528666-1-7

DOCUMENT TYPE: LANGUAGE:

Conference English

AB Near IR (NIR) spectroscopy is suggested as a simple and convenient method for quant. determination of alkyl polyglycosides (AGs) mixture as well as pure AG-decyl glucopyranoside (10G1) in an aqueous solution A rapid, accurate and nondestructive quant. determination of 10G1 and total concentration of AG

mixture in aqueous solution was conducted using NIR spectroscopy. The NIR region

in $800-2500 \ \mathrm{nm}$ was used and the models for quant. determination were developed by

using multiple linear regression (MLR). For 10G1 and AG mixts., the second derivative NIR data were utilized to build the model. In the anal. of NIR spectra, derivative spectroscopic technique are typically used since baseline offsets are largely eliminated without compromising the signal-to-noise ratio. The NIR data with the concentration of 0.030-0.570

mq/mL

were used in the study. The best calibration was constructed using MLR, providing a standard error of prediction of 0.053 and 0.061 mg/mL for 10G1 and AG mixts., resp. These results suggest that NIR spectroscopy can be utilized as a simple and convenient method for the determination of AG mixts.

as

well as 10G1 in aqueous solution THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 6 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L13 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2001:816831 CAPLUS DOCUMENT NUMBER: 135:359445 TITLE: Composition and process for cleaning floors Bejarano, Nancy Iris; Fogliacco, Julio Luis; Siviero, INVENTOR (S): Jose Daniel PATENT ASSIGNEE(S): Unilever N.V., Neth.; Unilever PLC; Hindustan Lever Ltd. SOURCE: PCT Int. Appl., 16 pp. CODEN: PIXXD2 Patent DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ----------_____ ----WO 2001-EP3880 WO 2001083659 A1 20011108 20010405 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG 20030204 BR 2001-10422 BR 2001010422 Α A 20000502 PRIORITY APPLN. INFO.: EP 2000-201609 W 20010405 WO 2001-EP3880 AB Invention concerns cleaning compns. for polymer coated wooden floors comprising: 0.5-5.0 at least one C8-18 alkylpolyglycoside detergent surfactants wherein the polyglycoside group contains 1-4 glycoside units, 0.5-5.0 an ethylene glycol C2-5 alkyl ether, and 0.5-5.0 a C2-4 alkanol and which do not contain any quaternary ammonium compds. The ethylene glycol ether is preferably the Bu ether and the alkanol is preferably isopropanol. The invention also concerns a process for cleaning polymer coated wooden floors comprising applying a composition according to the invention to the floor or an aqueous solution thereof containing at least 1 part of the composition per 200 parts of solution Thus, composition comprising alkyl polyglucoside (a mixture of decyl and octyl glucoside and C10-16 alkyl glucopyranoside) 1.50, iso-Pr alc. 2.0, Butyl Cellosolve 2.0, citric acid 0.0020, 1,2-benzisotiazolin-3-one 0.016, perfume 0.7, yellow colorant 0.0002, red colorant 0.0002, blue colorant 0.00001, and demineralized water q.s. to 100% is applied on a polyurethane coated wooden floor showing no damage to the floor coating. REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L13 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2001:503335 CAPLUS DOCUMENT NUMBER: 136:114918 TITLE: Near-infrared spectroscopy as a convenient analytical

method for alkyl polyglycosides

.QAZI

AUTHOR(S): Kim, J.-Y.; Woo, Y.-A.; Kim, H.-J.; Kim, J.-D.

CORPORATE SOURCE: Department of Chemical Engineering, Korea Advanced

Institute of Science and Technology, Taejon, 305-701,

S. Korea

SOURCE: Journal of Pharmaceutical and Biomedical Analysis

(2001), 26(1), 73-78

CODEN: JPBADA; ISSN: 0731-7085

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

AB Near IR (NIR) spectroscopy is used for the rapid determination of decyl glucopyranoside (10G1) and alkyl polyglycoside

(AG) mixts. having different alkyl chain length and the number of glucose unit in aqueous solution NIR spectroscopy is a much simpler spectroscopic

anal.

method compared to three anal. methods for mixture of AGs such as thin layer chromatog. (TLC), high performance liquid chromatog. (HPLC), and photometry method. NIR spectra of AGs between 0.030 and 0.540 mg/mL in aqueous solns. were utilized to develop a calibration model. Both raw spectra and the second derivs. of AGs were tested for the best fit. The best calibration was built with second derivative spectra by using multiple linear regression (MLR). The standard error of calibration (SEC) and the standard error of prediction (SEP) were used for the evaluation of the model. The best calibration provides an SEP of 0.052 and 0.061 mg/mL for the prediction set of 10G1 and AG mixture, resp.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:764475 CAPLUS

DOCUMENT NUMBER: 133:355572

TITLE: Langmuir monolayer of alkyl

polyglycoside in concentrated NaCl solution

AUTHOR(S): Kim, Jong-Yun; Kim, Mu-Hyun; Nakanishi, Fusae; Kim,

Jong-Duk

CORPORATE SOURCE: Dept. of Chem. Eng., KAIST, Taejon, 305-701, S. Korea

SOURCE: Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid

Crystals (2000), 349, 239-242 CODEN: MCLCE9; ISSN: 1058-725X Gordon & Breach Science Publishers

PUBLISHER: Gordon & DOCUMENT TYPE: Journal

LANGUAGE: English

AB Langmuir monolayer of alkyl polyglycosides (AP) having different alkyl chain length and d.p. was studied. NaCl aqueous solution with 5 M concentration is

enough to prepare the insol. monolayers of some series of APs.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:143060 CAPLUS

DOCUMENT NUMBER: 132:256331

TITLE: Zeta potential of nanobubbles generated by

ultrasonication in aqueous alkyl

polyglycoside solutions

AUTHOR(S): Kim, Jong-Yun; Song, Myung-Geun; Kim, Jong-Duk
CORPORATE SOURCE: Department of Chemical Engineering, Korea Advanced

Institute of Science and Technology, Taejon, 305-701,

S. Korea

QAZI

SOURCE: Journal of Colloid and Interface Science (2000),

223(2), 285-291

CODEN: JCISA5; ISSN: 0021-9797

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal LANGUAGE: English

A simple and convenient method to measure microelectrophoretic mobilities was proposed to determine the zeta potential of nanobubbles generated by ultrasonication. Bubbles in pure water solns. and in aqueous solns. of

alkyl polyglycoside (AG) with different alkyl chain

lengths and ds.p. in the head group were sonicated with a Pd-coated electrode designed specially by the manufacturer. The zeta potentials of bubbles with ordinary cationic and ionic surfactants are consistent with others' previous results. The average size of the bubbles generated by sonication is in the range of 300-500 nm. The zeta potentials of bubbles in both pure water and AG solns. at all pH values are neg. As the chain length of AG increases, zeta potentials significantly decrease at high pH. For nonionic AG, a possible charging mechanism based on known mechanisms is suggested to explain the neg. charge, known to be unusual. Even with a very high concentration of H+ ions in solution the bubbles are charged neg.

because the interface is covered with slightly acidic alc. groups of AGs. At high pH, the less polar the surfactant, the more neg. the charge, since

nonpolar surfactant mols. induce the adsorption of OH- ions, rather than H+ ions that prefer hydration by water mols. (c) 2000 Academic Press.

REFERENCE COUNT: THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS 26

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:199251 CAPLUS

DOCUMENT NUMBER: 130:224624

TITLE: Enzymic analysis of alkyl polyglycosides. Enzymic

> degradation by α -glucosidase, β -glucosidase, and isomaltase

Kroh, Lothar W.; Neubert, Timo; Raabe, Ellen; AUTHOR (S):

Waldhoff, Heinrich

CORPORATE SOURCE: Technical University Berlin, Berlin, Germany

SOURCE: Tenside, Surfactants, Detergents (1999), 36(1), 19-21

CODEN: TSDEES; ISSN: 0932-3414

PUBLISHER: Carl Hanser Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

The aim of the investigations is to develop a method for the quant. determination

of alkyl polyglucosides based on enzymic determination of glucose after enzymic hydrolysis. To achieve this, the glycosidic bonds between the glucose mols. as well as between the fatty alc. and glucose are hydrolyzed by

carbohydrolases and, after determination of the released glucose concentration the active

substance content in com. alkyl polyglycoside surfactants can be calculated. In a first step, the ability of the carbohydrolases α -glucosidase, β -glucosidase, and isomaltase to cleave the glucosidic bond between fatty alc. and carbohydrate was shown by means of the model surfactants octyl- α and octyl- β -Dglycopyranoside. By the hydrolases tested so far it was not possible to achieve a complete hydrolysis of all glucosidic bonds in the test samples Glucopon 215 and Glucopon 600. This is why the calculated value (based on the released glucose) of the active substance content is lower than specified by the manufacturer. In further expts. it will be tested whether it is possible to achieve a quant. hydrolysis using addnl. types of

carbohydrolases or to achieve a quantification with the help of a

correction factor.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:12528 CAPLUS

DOCUMENT NUMBER:

130:57025

TITLE:

Cosmetic and dermatologic oil-in-water emulsion formulations for light protection containing

hydrophobic inorganic micropigments and hydrophilic

surfactants

INVENTOR(S):

Gers-Barlag, Heinrich; Kroepke, Rainer

PATENT ASSIGNEE(S):

Beiersdorf A.-G., Germany

SOURCE:

Ger. Offen., 20 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT	NO.			KIN	D	DATE		i	APPL	ICAT	ION 1	NO.		D	ATE	
						_									-		
DE	1972	5087			A1		1998	1217	J	DE 1	997-	1972	5087		1:	9970	513
EP	9081	72			A1		1999	0414]	EP 1	998-	1099	41		1:	9980	530
	R:	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		TD	ОТ	T CD	T 17	DT	B0										

IE, SI, LT, LV, FI, RO PRIORITY APPLN. INFO.:

DE 1997-19725087 A 19970613

OTHER SOURCE(S): MARPAT 130:57025

AB Formulations containing suspended hydrophobic inorg. pigment microparticles in the oil phase as photoprotectants are stabilized against phase separation, migration of pigment particles into the aqueous phase, and agglomeration of the pigment particles by inclusion of a hydrophilic surfactant such as an alkyl glucoside, acyl lactylate, betaine, or coco amphoacetate, preferably together with a coemulsifier and a water-soluble or oil-soluble UV-B filtering agent. Thus, an oil-in-water lotion contained glyceryl stearate 3.50, stearic acid 1.80, glycerin 3.00, cetostearyl alc. 0.50, octyldodecanol 7.00, dicaprylyl ether 8.00, cetostearyl isononanoate 6.00, Plantaren 2000 (alkyl polyglycoside surfactant) 1.00, hydrophobic TiO2 1.00, Carbomer 0.20, 45% NaOH 0.20, preservative, perfume, and demineralized water to 100.00 weight%.

L13 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1996:337899 CAPLUS

DOCUMENT NUMBER:

125:11356

TITLE:

Method for producing sugar fatty acid esters by

enzymic esterification

INVENTOR(S):

Ando, Hideo; Iwasaki, Ryozo; Tamya, Michikatsu;

Uemura, Shingo

PATENT ASSIGNEE(S):

Lion Corp, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

. 1

PATENT INFORMATION:

PRIORITY APPLN. INFO.: JP 1994-228802 19940830 Sugar fatty acid esters, useful as surfactants, are prepared by reaction of 1 or ≥2 sugars selected from lower alkyl glycosides and polyglycosides (preparation described below) with 1 or ≥2 fatty acids selected from C6-22 (un)saturated fatty acids and their lower alc. esters in the presence of a hydrolase, wherein the acid catalyst described bellow or acid catalyst-derived substances in said sugar raw materials are removed to be substantially nonexistent and then subjected to enzymic esterification. Said lower alkyl glycosides and polyglycosides are obtained by reacting (1) a C5-7 monosaccharide obtained by hydrolysis of polysaccharides or oligosaccharides in the presence of an acid catalyst and a disaccharide consisting of hexoses, (2) polysaccharides, (3) oligosaccharides, (4) a C5-7 monosaccharide, or (5) a disaccharide consisting of hexoses, with a lower alc. in the presence of an acid catalyst. Removal of the acid catalyst or acid catalyst-derived substances for the raw material prevents the lowering of enzyme activity, enables repeated use of the enzyme, and makes this process industrially suitable. Thus, Me glucoside (prepared by methanolysis of corn starch in the presence of H2SO4 and made substantially free from MeOSO3H, ≤5 ppm, by treatment with an ion exchange resin), Me caprylate, a Candida antarctica-derived heat resistant lipase immobilized on a acrylic resin (NOVA Inc.), and $\beta\text{-picoline}$ were added to a flask in Me caprylate/methyl glucoside ratio mol of 4, β-picoline/methyl glucoside weight ratio of 4, and immobilized lipase/methyl glucoside weight ratio of 0.1 and heated in vacuo at 70° for 3 h while only refluxing β -picoline to give Me glucoside caprylate esters with .apprx.95% conversion of Me glucoside vs. 0% conversion of Me glucoside containing 41,000 ppm MeOSO3H. The immobilized catalyst was recycled 12-times although the longer reaction time (5-7 h) was required to reach 95% conversion of Me glucoside. => d his (FILE 'HOME' ENTERED AT 13:13:01 ON 10 MAY 2006) FILE 'REGISTRY' ENTERED AT 13:13:16 ON 10 MAY 2006 L11 S 110615-47-9/RN FILE 'CAPLUS' ENTERED AT 13:13:53 ON 10 MAY 2006 L20 S L1 L3 0 S L2 L40 S L1 FILE 'CAPLUS' ENTERED AT 13:14:52 ON 10 MAY 2006 L5 0 S L1 L6 508 S ALKYL POLYGLYCOSIDE L7 0 S D-GLUCOPYRANISODE L8 0 S GLUCOPYRANISODE L9 0 S GLUCOPYRANISIDE L10 15090 S GLUCOPYRANOSIDE L11 4088 S SULFONYLUREAS

=> d l14 and l13
L13 IS NOT VALID HERE
For an explanation, enter "HELP DISPLAY".

1 S L6 AND L11

9 S L6 AND L10

5 S L6 AND HERBICIDE

15 S L10 AND HERBICIDE

L12

L13

L14 L15 => s 113 and 114

0 L13 AND L14

=> 114 1-5 ibib hitstr abs

L14 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> d l14 1-5 ibib hitstr abs

L14 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:940781 CAPLUS

DOCUMENT NUMBER: 143:224141

TITLE: Preparation for killing water hyacinth in water area

INVENTOR(S): Wang, Wei; Chen, Zhiming; Zhou, Shuguang; Zheng, Hongchao; Qian, Wenfei; Bao, Min; Chen, Yifei

PATENT ASSIGNEE(S): Zhejiang Xian Chemical Industrial Group Co., Ltd.,

Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -------------------CN 1439266 Α 20030903 CN 2003-104097 20030224 PRIORITY APPLN. INFO.: CN 2003-104097

The material of the preparation comprises glyphosate and its salt as available component 10-70, one or more kinds of sulfonylurea herbicide as available component 2-10, filler 1-80, and surfactant 6-20%. glyphosate salt may be isoproprylamine, triethylamine, methylamine, ethanolamine, ammonium, K, Na salt, and caoliulin; the sulfonylurea herbicide may be metsulfuron-Me, chlorsulfuron, tribenuron, DPX-A7881, triasulfuron, and thifensulfuron, etc.; the filler may be Na2CO3, K2CO3, Na2SO3, NaHCO3, KHCO3, 2SO4, and NaSO4; and the surfactant may be fatty epoxy ethane and its addition compound, or amino silicone oil, or tea saponin, or alkyl polyglycoside. The glyphosate or its salt and sulfonylurea herbicide can be mixed together before using, and can be used resp. in 12 h.

L14 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:76765 CAPLUS

DOCUMENT NUMBER: 142:350518

TITLE: Deposition and leaching of tebuthiuron on sugar cane

straw applied with and without alkyl

polyglycoside adjuvant

AUTHOR (S): Negrisoli, Eduardo; Drolhe da Costa, Eduardo Antonio;

Velini, Edivaldo Domingues; Cavenaghi, Anderson Luis;

Tofoli, Gustavo Radomille

CORPORATE SOURCE: Faculdade de Agronomia da Universidade do Estado de

Sao Paulo, UNESP/Botucatu, Brazil

SOURCE: Journal of Environmental Science and Health, Part B:

Pesticides, Food Contaminants, and Agricultural Wastes

(2005), B40(1), 207-214 CODEN: JPFCD2; ISSN: 0360-1234

PUBLISHER: Taylor & Francis, Inc. DOCUMENT TYPE: Journal LANGUAGE: English

AB A laboratory experiment was carried out to study the effects of an alkyl polyglycoside adjuvant (APG) on deposition and leaching of the herbicide tebuthiuron applied on sugarcane straw. Tebuthiuron, at a concentration of 1200 mg L-1, was applied sep. and in tank mix with the APG adjuvant, at concns. of 0.07 and 0.09% (weight/volume), using a spraying volume of 204 L ha-1. A precipitation equivalent to 20 mm of rain was simulated, 24 h after

the applications, to evaluate the herbicide leaching.
Tebuthiuron was determined by HPLC. The addition of APG adjuvant at 0.07% (weight/volume) provided an increase of 11.5% in the deposition of tebuthiuron on straw and a reduction of 50.4% in the drift of the herbicide but did not affect significantly the leached amount (68.5%), when compared with the treatment where tebuthiuron was applied alone (70.8%). At the concentration

of 0.09% (weight/volume), the APG adjuvant caused an increase of 22.7% in the deposition; APG reduced the drift of the **herbicide** by 99.9% and reduced the leached amount by 7.6% thereby increasing the retention of the **herbicide** by straw.

REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:203381 CAPLUS

DOCUMENT NUMBER:

138:223306

TITLE:

Alkyl polyglycoside surfactant

systems for agriculturally active compounds

INVENTOR(S):

Hopkinson, Michael J.; Moore, Carolyn E.; Fowler,

Jeffrey D.

PATENT ASSIGNEE(S):

Syngenta Crop Protection, Inc., USA

SOURCE:

U.S. Pat. Appl. Publ., 11 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	NO.	KIN	KIND DATE			ICATION	DATE						
US 2003050194 US 6746988				30313 30608	US 2								
CA 2459	CA 2459698				CA 2		20020905						
WO 2003	WO 2003022049				WO 2		20020905						
	AE, AG,												
			DE, DK,										
			IL, IN,										
	_		MA, MD,								-		
	PL, PT,	RO, RU,	SD, SE,	SG,	SI, SK,	SL, TJ,	TM,	TN,	TR,	TT,	TZ,		
			VC, VN,										
	RU, TJ,	TM					•	•	•	•	•		
RW:	GH, GM,	KE, LS,	MW, MZ,	SD,	SL, SZ,	TZ, UG,	ZM,	ZW,	AT,	BE,	BG,		
			DK, EE,										
			BF, BJ,										
	NE, SN,										•		
EP 1423	001	A1	2004	0602	EP 2		20020905						
R:	AT, BE,	CH, DE,	DK, ES,	FR,	GB, GR,	IT, LI,	LU,	NL,	SE,	MC,	PT,		
			FI, RO,								•		
BR 2002				20041013 BR 2002-1254									
PRIORITY APP					US 2001-317474P P 20010907								